Continuous Tempering

TheChocolateLife :: LIVE
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generate a certain percentage of the proper crystal •
extend shelf life •
optimum mouth feel and melt •

purposes of tempering

table (hand) aka *tabliering* •

batch (manual, semi-automatic, automatic) •

silk (table, manual batch) •

continuous (Archimedes screw, disc) •

tempering methods

- stop and start the screw to control the flow of chocolate
- high capacity relative to space required
- can work non-stop throughout the workday
- adaptability

getting screwed

Melt out all existing crystals
(this reliably happens around 115F (45C)

step 1

Cool the chocolate down to form the desired type and quantity of crystals using combination of time, temperature, agitation, & mixing

step 2

Warm the chocolate to an equilibrium temperature •

This is the major conceptual hurdle people have to jump over when moving from hand/batch to continuous tempering – a third temperature zone is *not* a requirement

Step 3 (optional)

Automatic tempering machines are not artificially intelligent.
They can only do what you tell them.
You need to know what good temper looks like.
You should know how to temper manually.

observation

basic theory •
advanced topics •
calculating throughput •
pros and cons •

ct machines

my pet peeves

There's more to cleaning/washing than the time it takes to remove the auger.

cleaning ct machines

Continuous tempering machine manufacturers often give the time it takes to temper a given amount of chocolate – this is the time from it being melted and at an optimum temperature. Many factors affect this time.

time to temper

- adaptability cuts many ways
- ct machines are not home kitchen appliances
- ct machines *cannot* automagically determine temper chocolate
- they take time to learn to use properly
- you have to think about production scheduling differently
- preventive maintenance is important

keep expectations in check

In Closing